—Standard Valves—

4102-D, -E AND -G VALVES

TRIODES.

4102-D, -E, -G valves have similar characteristics.

4102-E valve has a filament designed to reduce sputter noise.

4102-G valve is similar to 4102-E valve but has the anode lead brought out through the stem to increase grid–anode insulation.

SPECIFICATION.

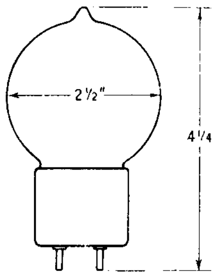
Cathode.

Oxide coated filament.

Constant current type.

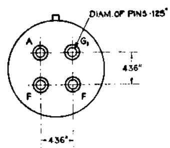
Base.

Medium 4-pin bayonet thrust.



Dimensions.

Overall length	4¼" (10·8 cms.)
Bulb diameter	2½" (6·4 cms.)
Net weight	0·14 lbs. (65 gms.)



Constants.

Filament current	0·97 amps.
Nominal filament voltage	2 volts
*Impedance	60,000 ohms
*Amplification factor	30
*Mutual conductance	0·5 mA. per volt
Grid–anode capacity	5·6 $\mu\mu$F.
Anode–filament capacity	2·3 $\mu\mu$F.
Grid–filament capacity	3·8 $\mu\mu$F.

* *at anode current of* 0·75 *mA.*

LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	190 volts
Maximum direct anode current	1·5 mA.

V.4102-DEG.1
Nov. 1937

—Standard Valves—

TYPICAL OPERATING CONDITIONS.

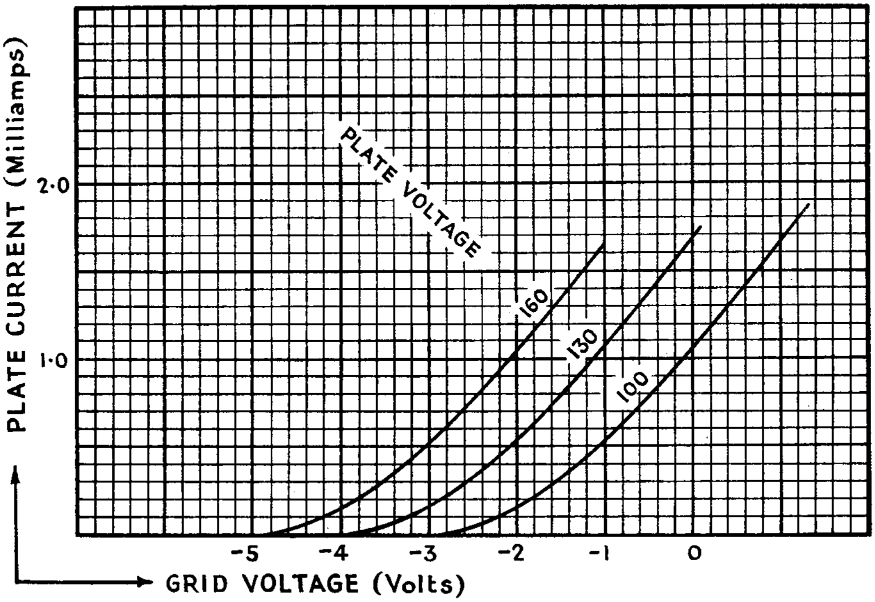
Anode voltage	Grid Bias	Anode current	Amplification factor	Anode resistance	Load resistance	Output voltage	Second harmonic
volts	volts	milliamps		ohms rp	R	peak volts	db
130	—2·0	0·36	29·4	80,000	R=rp R=3rp R=5rp	27 38 41	20 24 25
130	—1·5	0·58	29·8	63,000	R=rp R=3rp R=5rp	20 30 34	26 31 33
130	—1·0	0·85	30·1	53,000	R=rp R=3rp R=5rp	15 20 23	33 39 40
160	—3·0	0·34	29·2	81,000	R=rp R=3rp R=5rp	40 57 62	18 21 22
160	—2·0	0·80	29·9	54,000	R=rp R=3rp R=5rp	28 42 45	27 33 34
160	—1·0	1·45	30·3	42,000	R=rp R=3rp R=5rp	15 21 24	38 43 48
*190	—3·0	0·83	29·8	54,000	R=rp R=3rp R=5rp	42 63 68	23 28 30
*190	—2·0	1·46	30·2	43,000	R=rp R=3rp R=5rp	30 43 48	31 38 41

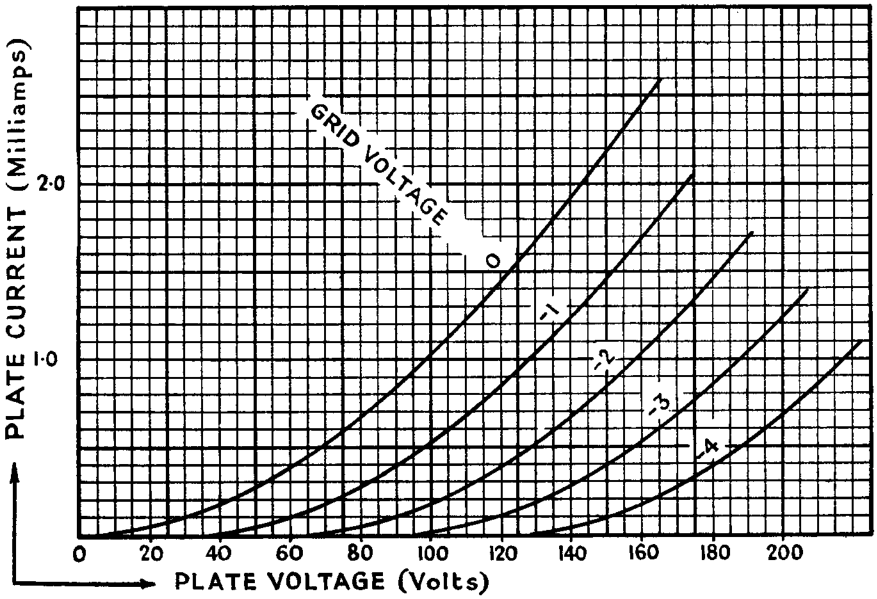
* Maximum operating conditions.

PRINTED IN
ENGLAND

—Standard Valves—

These curves are taken with direct filament heating, grid and anode voltages being referred to negative end of filament.





PRINTED IN
ENGLAND